



1645
PATENT

Case Docket No. UC089.1CPC1CP1
Date: May 23, 2002

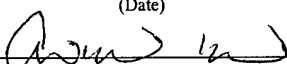
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s) : TSIEN et al.
Appln. No. : 09/865,291
Filed : May 24, 2001
For : EMISSION RATIOMETRIC
INDICATORS OF
PHOSPHORYLATION

I hereby certify that this correspondence and all marked attachments are being deposited with the United States Postal Service as first-class mail in an envelope addressed to: United States Patent and Trademark Office, PO Box 2327, Arlington VA 22202, on

May 23, 2002

(Date)


Ginger R. Dreger, Reg. No. 33,055

Examiner : Unknown
Art Unit : 1645

RECEIVED

JUN 03 2002

TECH CENTER 1600/2900


TRANSMITTAL LETTER

UNITED STATES PATENT AND TRADEMARK OFFICE
P.O. Box 2327
Arlington, VA 22202

Dear Sir:

Enclosed for filing in the above-identified application are:

- (X) Establishment of Right of Assignee to Take Action and Revocation and Power of Attorney.
- (X) Copies of two of the Recorded Assignment Documents and two Agreements stamped "COPY – DO NOT RECORD".
- (X) The Commissioner is hereby authorized to charge any additional fees that may be required, or credit any overpayment, to Account No. 11-1410.
- (X) Return prepaid postcard.


Ginger R. Dreger
Registration No. 33,055
Attorney of Record

W:\DOCS\EJD\UC\UC089.1CPC1CP1\EJD-1192.DOC
052302

COPY
Do Not Record

PATENT
Attorney Docket No.: REGEN1550

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Tsien et al. Art Unit: 1645
Application No.: 09/865,291 Examiner: Unassigned
Filed: May 24, 2001
Title: EMISSION RATIOMETRIC INDICATORS OF PHOSPHORYLATION

BOX ASSIGNMENT

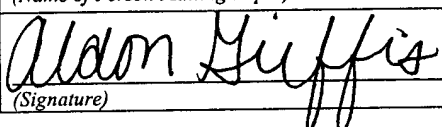
Director – U.S. Patent and Trademark Office
Washington, D.C. 20231

TRANSMITTAL SHEET

Sir:

Transmitted herewith for the above-identified application, please find:

1. Two Recordation Form Cover Sheets and associated executed Assignments (3 pages and 8 pages, respectively);
2. Check Nos. 498278 and 498279 in the amount of \$40.00 each; and
3. Return Receipt Postcard.

CERTIFICATION UNDER 37 CFR §1.8	
I hereby certify that the documents referred to as enclosed herein are being deposited with the United States Postal Service as first class mail on this date, January 15, 2002 , in an envelope addressed to: Box ASSIGNMENT, Director, U.S. Patent and Trademark Office, Washington, D.C. 20231.	
Aldon Griffis (Name of Person Mailing Paper)	
 (Signature)	January 15, 2002 (Date)

COPY
Do Not Record

In re Application of:

Tsien et al.

Application No.: 09/865,291

Filed: May 24, 2001

Page 2

PATENT

Attorney Docket No.: REGEN1550

Enclosed are Check Nos. 498278 and 498279 in the amount of \$40.00 each for the Assignment Recordation Filing fees. The Commissioner is authorized to charge any other fees, or credit any overpayments, to Deposit Account No. 50-1355. A duplicate copy of this Transmittal Sheet is enclosed.

Respectfully submitted,

Date: January 15, 2002



Lisa A. Haile, J.D., Ph.D.

Registration No.: 38,347

Telephone: (858) 677-1456

Facsimile: (858) 677-1465

USPTO CUSTOMER NUMBER 28213
GRAY CARY WARE & FREIDENRICH LLP
4365 Executive Drive, Suite 1100
San Diego, California 92121-2133

UC089.1CPC1CP1



PATENT

#5
power of
att.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : TSIEN et al.) Art Unit: 1645
App. No. : 09/865,291)
Filed : May 24, 2001)
Title : EMISSION RATIONOMETRIC)
INDICATORS OF)
PHOSPHORYLATION)
Examiner : Unknown)

RECEIVED

JUN 03 2002

TECH CENTER 1600/2900

ESTABLISHMENT OF RIGHT OF ASSIGNEE TO TAKE ACTION
AND
REVOCATION AND POWER OF ATTORNEY

United States Patent and Trademark Office
P.O. Box 2327
Arlington, VA 22202

Dear Sir:

The undersigned is empowered to act on behalf of the assignee below (the "Assignee"). One of the two original Assignments is recorded at Reel 012588 and Frame 0464 from the inventor, Roger Y. Tsien, to the Assignee, HOWARD HUGHES MEDICAL INSTITUTE. The second original Assignment of the above-captioned application recorded at Reel 012588 and Frame 0471 from the inventor, Roger Y. Tsien, acting as an agent for HOWARD HUGHES MEDICAL INSTITUTE, conveying all right, title and interest of HOWARD HUGHES MEDICAL INSTITUTE to the Assignee, THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, and also from the inventors, Alice Y. Ting and Jin Zhang, to the Assignee, THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, and two Agreements, each executed by Assignors, Alice Y. Ting and Jin Zhang is attached hereto. These Assignments represent the entire chain of title of this invention from the Inventor(s) to the Assignee.

App. No. : 09/865,291
Filed : May 24, 2001

I declare that all statements made herein are true, and that all statements made upon information and belief are believed to be true, and further, that these statements were made with the knowledge that willful, false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001, and that willful, false statements may jeopardize the validity of the application, or any patent issuing thereon.

The undersigned hereby revokes any previous powers of attorney in the subject application, and hereby appoints the registrants of Knobbe, Martens, Olson & Bear, LLP, 620 Newport Center Drive, Sixteenth Floor, Newport Beach, California 92660, Telephone (949) 760-0404, **Customer No. 20,995**, as its attorneys with full power of substitution and revocation to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected herewith. This appointment is to be to the exclusion of the inventor(s) and his attorney(s) in accordance with the provisions of 37 C.F.R. § 3.71.

Please use **Customer No. 20,995** for all communications.

CALIFORNIA THE REGENTS OF THE UNIVERSITY OF

Dated: May 21, 2002

By: Linda S. Stevenson
Linda S. Stevenson

Title: Manager, Patent Prosecution

Address: 1111 Franklin Street, 5th Floor
Oakland, California 94607-5200



UNITED STATES
PATENT AND
TRADEMARK OFFICE



COPY
Do Not Record

RECEIVED

JUN 03 2002

TECH CENTER 1600/2900

ULC089.1CPC/CP1

APRIL 16, 2002

PTAS

GRAY CARY WARE & FREIDENRICH LLP
LISA A. HAILE, J.D., PH.D.
4365 EXECUTIVE DRIVE, SUITE 1100
SAN DIEGO, CA 92121-2133

Chief Information Officer
Washington, DC 20231
www.uspto.gov



101991715A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 02/04/2002

REEL/FRAME: 012588/0471

NUMBER OF PAGES: 8

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

TING, ALICE Y.

DOC DATE: 09/25/2001

ASSIGNOR:

HOWARD HUGHES MEDICAL INSTITUTE

DOC DATE: 09/21/2001

ASSIGNOR:

ZHANG, JIN

DOC DATE: 09/26/2001

ASSIGNEE:

REGENTS OF THE UNIVERSITY OF
CALIFORNIA, THE
1111 FRANKLIN STREET, FIFTH FLOOR
OAKLAND, CALIFORNIA 94607-5200

SERIAL NUMBER: 09865291

FILING DATE: 05/24/2001

PATENT NUMBER:

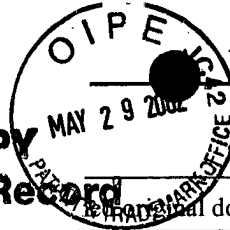
ISSUE DATE:

012588/0471 PAGE 2

COPY
Do Not Record

TONYA LEE, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

02-25-2002



Docket No.: REGEN1550

To the Honorable Commissioner for Patents

101991715

Do Not Record

Transmit documents or copy thereof.

1. Name of Conveying party(ies):

- a. Alice Y. Ting
b. Howard Hughes Medical Institute
c. Jin Zhang

2-4-02

Additional name(s) of conveying party(ies)
attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of name
☐ Other

Execution Date: a. September 25, 2001
b. September 21, 2001
c. September 26, 2001

2. Name and address of receiving Party(ies)

Name: The Regents of the University of California

Internal Address: _____

Street Address: 1111 Franklin Street, Fifth FloorCity: Oakland State: CA Zip: 94607-5200

Additional name(s) & address(es) attached?

☐ Yes ☒ No

RECEIVED

JUN 03 2002

TECH CENTER 1600/2900

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)

09/865,291

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Lisa A. Haile, J.D., Ph.D.GRAY CARY WARE & FREIDENRICH LLPStreet Address: 4365 Executive Drive, Suite 1100City: San Diego State: CA Zip: 92121-21336. Total number of Applications and patents involved: 1

7. Total fee (37 CFR 3.41)

\$ 40.00☒ Enclosed - Check No.: 498279☒ Authorized to charge any underpayment to
Deposit Account No. 50-1355.

DO NOT USE THIS SPACE

9. Statement and signature:

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Lisa A. Haile, J.D., Ph.D.January 15, 2002

Name of Person Signing

Signature

Date

Registration No. 38,347

02/22/2002 LMUeller 00000257 09865291

01 FC:581

40.00

Total number of pages including cover sheet, attachments, and document: 8

COPY
Do Not Record

PATENT
REGEN1550

ASSIGNMENT
(BY INVENTOR(S))

This assignment ("Assignment") is made by Alice Y. Ting, of La Jolla, California, ("Assignors") to THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, a non-profit organization ("Assignee"), having a place of business at 1111 Franklin Street, Fifth Floor, Oakland, California 94607-5200.

Recitals

A. Each of the Assignors has invented a new and useful invention entitled EMISSION RATIOMETRIC INDICATORS OF PHOSPHORYLATION, for which an application for United States Letters Patent was filed on May 24, 2001 in the United States Patent and Trademark Office.

B. Each of the Assignors authorizes and requests insertion of the application serial number of the application when officially known:

The United States Application Serial No.: 09/865,291.

C. Each of the Assignors believes the Assignors to be the original, first and joint inventors of the invention disclosed and/or claimed in the application for Letters Patent.

D. The parties desire to have a recordable instrument assigning from the Assignors to the Assignee the entire rights, title and interest in and to the invention, the application and all Letters Patent in the United States and throughout the world that may be granted or issued for the invention or that derive a right of priority from the application (including, without limitation, all divisional, continuation, continuation-in-part and continued prosecution applications thereof, and all reissues and reexaminations thereof, and all foreign counterparts thereof) (collectively, the "Invention Patents").

COPY
Do Not Record

PATENT
REGEN1550

Agreement

NOW, THEREFORE, in accordance with the obligations to assign the Invention Patents and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each of the Assignors agrees to the foregoing and as follows:

1. Each of the Assignors does and will sell, assign and transfer to Assignee, such Assignor's entire rights, title, and interest in and to each of the Invention Patents, including, without limitation, the rights to file foreign applications directly in the name of the Assignee and to claim for any such foreign applications any priority rights to which such applications are entitled under international conventions, treaties, or otherwise.

2. Each of the Assignors agrees that, upon request and without further compensation, but at no expense to such Assignor, such Assignor and such Assignor's legal representatives and assigns will do all lawful acts, including the execution of papers and the giving of testimony, that may be necessary or desirable for obtaining, sustaining, reissuing, or enforcing each of the Invention Patents in the United States and throughout the world, and for perfecting, recording, or maintaining the title of Assignee, and Assignee's successors and assigns, in and to each of the Invention Patents in the United States and throughout the world. In the event that Assignee is unable for any reason to secure any of the Assignors' signatures to any document that may be necessary or desirable for obtaining, sustaining, reissuing, or enforcing each of the Invention Patents in the United States and throughout the world, or for perfecting, recording, or maintaining the title of Assignee, and Assignee's successors and assigns, in and to each of the Invention Patents in the United States and throughout the world, each such Assignor hereby irrevocably designates and appoints Assignee and Assignee's duly authorized officers and agents as such Assignor's agents and attorneys-in-fact to act for and on such Assignor's behalf and instead of such Assignor to execute such document, all with the same legal force and effect as if executed by such Assignor.

3. Each of the Assignors represents and warrants that such Assignor has not granted and will not grant to others either (1) any rights, title or interest in and to any of the Invention Patents, or (2) any rights inconsistent with the rights granted herein.

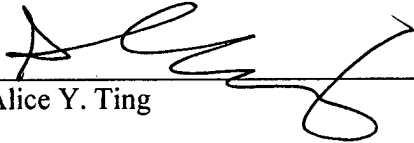
COPY
Do Not Record

PATENT
REGEN1550

4. Each of the Assignors authorizes and requests the Assistant Commissioner for Patents of the United States and the various counterparts thereof throughout the world to issue and/or grant any Letters Patent granted for each of the Invention Patents to Assignee, its successors and assigns, as the assignee of the entire interest in such Invention Patents.

5. This Assignment constitutes the entire agreement with respect to its subject matter and supersedes all prior or contemporaneous oral or written agreements concerning such subject matter. No waiver, amendment, or modification of this Assignment shall be effective against the Assignee, unless in writing executed by a duly authorized representative of the Assignee. This Assignment shall be governed in all respects by the laws of the United States of America and by the laws of the state/province of California, as such laws are applied to agreements entered into and to be performed entirely within California between California residents. Each of the parties irrevocably consents to the exclusive personal jurisdiction of the federal and state courts located in California, as applicable, for any matter arising out of or relating to this Assignment, except that in any action seeking to enforce any order or any judgment of such federal or state courts located in California, such personal jurisdiction shall be nonexclusive. A breach of any of the promises or agreements contained herein will result in irreparable and continuing damage to Assignee for which there will be no adequate remedy at law, and Assignee shall be entitled to injunctive relief and/or a decree of specific performance, and such other relief as may be proper.

Dated: Sept 25, 2001



Alice Y. Ting



COPY
Do Not Record

UC089.1CPC1CP1

APRIL 16, 2002

PTAS

Chief Information Officer
Washington, DC 20231
www.uspto.gov

GRAY CARY WARE & FREIDENRICH LLP
LISA A. HAILE, PH.D.
4365 EXECUTIVE DRIVE, SUITE 1100
SAN DIEGO, CA 92121-2133



101991716A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 02/04/2002

REEL/FRAME: 012588/0464
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:
TSIEN, ROGER Y.

DOC DATE: 02/27/2001

ASSIGNEE:
HOWARD HUGHES MEDICAL INSTITUTE
4000 JONES BRIDGE ROAD
CHEVY CHASE, MARYLAND 20815

SERIAL NUMBER: 09865291
PATENT NUMBER:

FILING DATE: 05/24/2001
ISSUE DATE:

VIOLET MCCOY, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

02-25-2002



Docket No.: REGEN1550

To the Honorable Commissioner for Patents and Trademarks, Washington, DC 20590
101991716
COPY original documents or copy thereof.

1. Name of Conveying party(ies):

a. Roger Y. Tsien

2-4-02

Do Not Record

2. Name and address of receiving Party(ies)

Name: Howard Hughes Medical Institute

Internal Address:

Street Address: 4000 Jones Bridge Road

City: Chevy Chase State: MD Zip: 20815

Additional name(s) & address(es) attached?

Yes ☒ NoAdditional name(s) of conveying party(ies)
attached? Yes ☐ No ☒

3. Nature of conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of name☐ Other

Execution Date: a. September 27, 2001

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)

09/865,291

B. Patent No.(s)

Additional numbers attached? Yes ☐ No ☒

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Lisa A. Haile, J.D., Ph.D.

GRAY CARY WARE & FREIDENRICH LLP

Street Address: 4365 Executive Drive, Suite 1100

City: San Diego State: CA Zip: 92121-2133

6. Total number of Applications and patents involved: 1

7. Total fee (37 CFR 3.41)

\$ 40.00

☒

Enclosed - Check No. 498278

☒Authorized to charge any underpayment to
Deposit Account No. 50-1355.

DO NOT USE THIS SPACE

9. Statement and signature:

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Lisa A. Haile, J.D., Ph.D.

Name of Person Signing

Registration No. 38,347

Signature

January 15, 2002

Date

Total number of pages including cover sheet, attachments, and document: 3

02/22/2002 LHMJELLER 00000258 09865291

01 FC:581

40.00 09

COPY
Do Not Record

PATENT
REGEN1550

ASSIGNMENT
(BY INVENTOR(S))

This assignment ("Assignment") is made by Jin Zhang, of San Diego, California, ("Assignors") to THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, a non-profit organization ("Assignee"), having a place of business at 1111 Franklin Street, Fifth Floor, Oakland, California 94607-5200.

Recitals

A. Each of the Assignors has invented a new and useful invention entitled EMISSION RATIOMETRIC INDICATORS OF PHOSPHORYLATION, for which an application for United States Letters Patent was filed on May 24, 2001 in the United States Patent and Trademark Office.

B. Each of the Assignors authorizes and requests insertion of the application serial number of the application when officially known:

The United States Application Serial No.: 09/865,291.

C. Each of the Assignors believes the Assignors to be the original, first and joint inventors of the invention disclosed and/or claimed in the application for Letters Patent.

D. The parties desire to have a recordable instrument assigning from the Assignors to the Assignee the entire rights, title and interest in and to the invention, the application and all Letters Patent in the United States and throughout the world that may be granted or issued for the invention or that derive a right of priority from the application (including, without limitation, all divisional, continuation, continuation-in-part and continued prosecution applications thereof, and all reissues and reexaminations thereof, and all foreign counterparts thereof) (collectively, the "Invention Patents").

COPY
Do Not Record

PATENT
REGEN1550

Agreement

NOW, THEREFORE, in accordance with the obligations to assign the Invention Patents and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each of the Assignors agrees to the foregoing and as follows:

1. Each of the Assignors does and will sell, assign and transfer to Assignee, such Assignor's entire rights, title, and interest in and to each of the Invention Patents, including, without limitation, the rights to file foreign applications directly in the name of the Assignee and to claim for any such foreign applications any priority rights to which such applications are entitled under international conventions, treaties, or otherwise.
2. Each of the Assignors agrees that, upon request and without further compensation, but at no expense to such Assignor, such Assignor and such Assignor's legal representatives and assigns will do all lawful acts, including the execution of papers and the giving of testimony, that may be necessary or desirable for obtaining, sustaining, reissuing, or enforcing each of the Invention Patents in the United States and throughout the world, and for perfecting, recording, or maintaining the title of Assignee, and Assignee's successors and assigns, in and to each of the Invention Patents in the United States and throughout the world. In the event that Assignee is unable for any reason to secure any of the Assignors' signatures to any document that may be necessary or desirable for obtaining, sustaining, reissuing, or enforcing each of the Invention Patents in the United States and throughout the world, or for perfecting, recording, or maintaining the title of Assignee, and Assignee's successors and assigns, in and to each of the Invention Patents in the United States and throughout the world, each such Assignor hereby irrevocably designates and appoints Assignee and Assignee's duly authorized officers and agents as such Assignor's agents and attorneys-in-fact to act for and on such Assignor's behalf and instead of such Assignor to execute such document, all with the same legal force and effect as if executed by such Assignor.
3. Each of the Assignors represents and warrants that such Assignor has not granted and will not grant to others either (1) any rights, title or interest in and to any of the Invention Patents, or (2) any rights inconsistent with the rights granted herein.

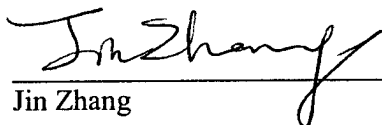
COPY
Do Not Record

PATENT
REGEN1550

4. Each of the Assignors authorizes and requests the Assistant Commissioner for Patents of the United States and the various counterparts thereof throughout the world to issue and/or grant any Letters Patent granted for each of the Invention Patents to Assignee, its successors and assigns, as the assignee of the entire interest in such Invention Patents.

5. This Assignment constitutes the entire agreement with respect to its subject matter and supersedes all prior or contemporaneous oral or written agreements concerning such subject matter. No waiver, amendment, or modification of this Assignment shall be effective against the Assignee, unless in writing executed by a duly authorized representative of the Assignee. This Assignment shall be governed in all respects by the laws of the United States of America and by the laws of the state/province of California, as such laws are applied to agreements entered into and to be performed entirely within California between California residents. Each of the parties irrevocably consents to the exclusive personal jurisdiction of the federal and state courts located in California, as applicable, for any matter arising out of or relating to this Assignment, except that in any action seeking to enforce any order or any judgment of such federal or state courts located in California, such personal jurisdiction shall be nonexclusive. A breach of any of the promises or agreements contained herein will result in irreparable and continuing damage to Assignee for which there will be no adequate remedy at law, and Assignee shall be entitled to injunctive relief and/or a decree of specific performance, and such other relief as may be proper.

Dated: Sept 26, 2001



Jin Zhang

COPY
Do Not Record

ATTORNEY DOCKET NO.:
REGEN1550

ASSIGNMENT

This Assignment is made by ROGER Y. TSIEN ("Inventor") to HOWARD HUGHES MEDICAL INSTITUTE, a Delaware not-for-profit corporation (the "Institute").

RECITALS

Inventor is an employee of the Institute and, as a condition of his employment, has signed the Agreement appended to the Institute's Statement of Policy on Intellectual Property (the "Intellectual Property Agreement").

Pursuant to the Intellectual Property Agreement, the Inventor has agreed (a) to assign to the Institute all rights he may acquire in any invention, discovery, improvement, or other intellectual property, whether or not patentable or copyrightable, developed directly or indirectly as a result of a program of research financed by Institute funds or by funds under the control of the Institute (each a "subject property") and (b) to execute any agreements that may be desired by the Institute in connection with such assignment.

Inventor has invented a new and useful invention entitled EMISSION RATIOMETRIC INDICATORS OF PHOSPHORYLATION for which an application for United States Letters Patent was filed on May 24, 2001, in the United States Patent and Trademark Office and assigned U.S. Serial No. 09/865,291 and identified as Attorney Docket No. REGEN1550.

Inventor seeks to make a formal assignment of his interest in the Invention to the Institute, and the Institute desires the execution of a formal assignment of all of Inventor's right, title and interest in the Invention.

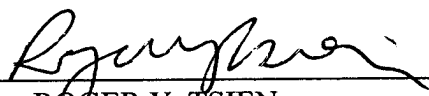
1. Assignment. In consideration of the promises contained in and the acts performed and to be performed pursuant to the Intellectual Property Agreement and of other good and valuable consideration, the receipt of which is hereby acknowledged by Inventor, the Inventor hereby assigns to the Institute the entire right, title, and interest in the Invention, all corresponding foreign patent applications, and any and all patents issued therefrom, all divisions and continuations based on any of the foregoing, and all claims contained in the United States and foreign continuations-in-part applications and patents which are directed to the Invention.

2. Cooperation. Inventor agrees to execute upon request such further assignments, documents, and other instruments as may be necessary or desirable fully and completely to assign the Inventor's interest in the Invention to the Institute and to assist the Institute in applying for, obtaining, and enforcing patents, copyrights, or other rights in the United States and in any foreign country with respect to any such Invention.

3. Parties. The terms and provisions of this Agreement shall inure to the benefit of the Institute and its successors and assigns and shall be binding on the Inventor and his heirs and successors.

4. Warranty. The Inventor warrants and represents that he has not entered into any assignment, contract, or understanding in conflict herewith.

Date: 9/27/01

Inventor: 
ROGER Y. TSIEN

COPY
Do Not Record

U.C. Case No. 2001-448-1

WHEREAS, I am acting as the agent for Howard Hughes Medical Institute ("HHMI") having an address at 4000 Jones Bridge Road, Chevy Chase, Maryland 20815 in conveying all right, title and interest of HHMI:

For good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR,

Roger Y. Tsien

hereby sells, assigns, and transfers to ASSIGNEE, the Regents of the University of California, a California Corporation, having its statewide administration offices located at 1111 Franklin Street, 5th Floor, Oakland, CA 94607-5200, and the successors, assigns and legal representatives of the ASSIGNEE all of its right, title and interest for the United States and its territorial possessions and in all foreign countries in and to, any and all improvements in the invention entitled:

EMISSION RATIOMETRIC INDICATORS OF PHOSPHORYLATION

and which is found in

- (a) _____ U.S. patent application executed on _____, entitled as above and listing the above named person as inventor
- (b) X U.S. patent application serial no. 09/865,291, filed on May 24, 2001
- (c) _____ U.S. Patent No.: _____, issued _____

and any legal equivalent thereof in a foreign country, including the right to claim priority and, in and to, all Letters Patent to be obtained for said invention by the above application or in any continuation, divisional, continuation-in-part, extension or substitute thereof, and any reissue, reexamination or extension of said Letters Patent and all rights under all International Conventions for the Protection of Industrial Property;

ASSIGNOR(S) hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;

ASSIGNOR(S) further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation, or proceeding relating thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue or enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof. An attorney of record is authorized and requested by the execution of this assignment to insert into this assignment the filing date and serial number of said application when officially known.

AND the ASSIGNOR(S) requests the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States and any reissue or extension thereof to the ASSIGNEE, The Regents of the University of California.

executed this

Signature of Inventor(s)

21 day of Sept, 2001


Roger Y. Tsien